

**REMARKS/ARGUMENTS**

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-50 are pending in the application. Claims 1, 10, 11, 15, 22, 30, 34, 39, 42 and 50 are independent claims.

**Allowable Subject Matter**

Applicants note with appreciation the indication on page 7 of the 2/26/2009 Office Action that claims 10, 14, 17-21, 26-29, 36-38, 40, 41 and 46-49 are either allowable or would be allowable if rewritten into independent form.

**35 U.S.C. § 102(e) - Karacaoglu**

Claims 1-9, 11-16, 22-25, 30-35, 39, 42-45 and 50 are rejected under 35 U.S.C. § 103(a) as allegedly being anticipated by U.S. Patent No. 6,684,058 ("Karacaoglu"). Applicants respectfully traverse this rejection.

Karacaoglu is directed to a universal repeater for a wireless communication system. Karacaoglu discloses a repeater system 100 that includes a near-end ISM band transceiver 200 (the "NEIT" station) and a far-end ISM band transceiver 300 (the "FEIT" station) (e.g., FIG. 1 and Col. 6, lines 25-47 of Karacaoglu). Essentially, the NEIT station receives PCS signals from a BTS of a donor cell, converts the carrier frequencies of the PCS signals to ISM frequencies, and transmits these signals using an antenna over ISM bands (e.g., see Col. 3, lines 5-15 of Karacaoglu). The FEIT station receives these signals, converts the carrier frequencies of these signals to PCS frequencies, and transmits the PCS signals at the desired location (e.g., see Col. 3, lines 5-15 of Karacaoglu).

The Examiner is reading the claim limitation of “delay circuit” upon Karacaoglu’s FEIT 300, such that the claim limitation of “a delay circuit configured to add a delay to the signal to compensate for a signal detection interval, a gain adjustment interval and a transmitter configuration interval” allegedly reads on the FEIT Specification requirement that a signal delay be no more than one (1) microsecond (e.g., see Pages 2-3 of the 2/26/2009 Office Action). Applicants respectfully disagree with this interpretation, as will now be explained in more detail.

In Karacaoglu’s Background section, Karacaoglu discusses that conventional repeater systems distribute repeaters that receive and repeat signals in the same frequency band (i.e., the PCS band). Thus, to relay a signal to a repeater at a remote location, the signal has to be repeated by multiple repeaters in the PCS band, which creates both signal delay and PCS-band interference when the signal is actually transmitted at the remote location. In particular, Karacaoglu states:

... cascading conventional repeaters to perform this task can be expensive and time consuming. More importantly, there are technical complications associated with cascading repeaters. One major complication is the associated overall time delay due to sequential repeaters, thereby limiting the maximum number of repeaters that can be cascaded without significant signal degradation.

*(e.g., see Col. 2, lines 37-44 of Karacaoglu, Emphasis added)*

Accordingly, it is an object of Karacaoglu to “enable expansion of coverage areas without imposing time-delay or intra-band interference” (e.g., see Col. 2, lines 49-54 of Karacaoglu). Karacaoglu’s solution to this problem is to convert a signal from a low-frequency band (i.e., PCS) to a high-frequency band (i.e., ISM) and then transmit the ISM signal from the NEIT to the FEIT. The FEIT then converts the ISM signal back to the PCS band for local transmission. The range of the repeater system is essentially extended by using the high-frequency ISM signal for the link between the NEIT and FEIT, delay is reduced (i.e., because fewer repeaters are involved) and PCS-band interference is reduced (i.e., because the ISM band is orthogonal to the PCS band). However, while this reduces delay because additional repeaters for relaying the

signal are not required between the NEIT and FEIT, delay is still a critical design constraint in the repeater system.

Accordingly, Applicants believe the Examiner is misinterpreting the signal delay referred to in the FEIT Specification on Columns 16-17 of Karacaoglu. In context, Applicants believe that the 1 microsecond signal delay refers to a delay limit in order to ensure proper functionality of Karacaoglu's repeater system using the NEIT and FEIT. Applicants do **not** believe that the signal delay referred to in this section of Karacaoglu is deliberately added by the FEIT 300 to *achieve* the delay of 1 microsecond, for instance. Rather, a design constraint for the FEIT is simply that the FEIT cannot introduce a signal delay of more than one (1) microsecond. In other words, the FEIT is not trying to add delay to compensate for anything, but Karacaoglu simply recognizes that a given amount of delay is inherent to any type of signal processing, and this inherent amount of delay cannot exceed 1 microsecond in the FEIT Specification. For example, if a FEIT is implemented that only experiences a .5 microsecond delay, Applicants submit it is contrary to the teachings of Karacaoglu that the FEIT would actually add additional delay to increase the delay to 1 microsecond, because 1 microsecond is the limit, not the requirement.

Accordingly, Applicants do not believe that the claim language of "a delay circuit configured to add a delay to the signal to compensate for a signal detection interval, a gain adjustment interval and a transmitter configuration interval" as recited in independent claim 1 can read upon Karacaoglu's 1 microsecond delay restriction for the FEIT 300. This aspect is also similarly recited in independent claims 11, 15, 22, 30, 39, 42 and 50, and Applicants further submit that these independent claims are also allowable over Karacaoglu at least for the reasons given above with respect to independent claim 1.

As such, claims 2-9, 12-14, 16, 23-25, 31-33, 35 and 43-45, dependent upon independent claims 1, 11, 15, 22, 30, 34 and 42, respectively, are likewise allowable over Karacaoglu at least for the reasons given above with respect to the independent claims.

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Applicants respectfully request that the Examiner withdraw this art grounds of rejection.

Reconsideration and issuance of the present application is respectfully requested.

**CONCLUSION**

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue, or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

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Respectfully submitted,

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